Application No. 10/635,391

Art Unit: 2815

AMENDMENTS TO THE CLAIMS

Claims 1-11 canceled.

12. (original) The integrated circuit incorporating an Electrostatic Discharge

(ESD) protection device comprising:

a semiconductor substrate;

an electrical contact pad;

a plurality of active devices formed on the substrate;

a first connector formed of a first electrically conductive material connecting the

plurality of active devices; and

an ESD switch coupled to the pad, at least in part via a second connector, said

ESD switch having an active device region in the semiconductor substrate, and wherein

said active device region has a length, said second connector electrically connected to

the ESD switch comprising material more resistant to thermo-mechanical expansion

than said first connector formed of said first electrical conductive material wherein the

second connector extends away from the substrate a distance at least equal to one-half

of the length of the active device region.

13. (original) The integrated circuit incorporating an Electrostatic Discharge

(ESD) protection device according to claim 12, wherein said material substantially more

resistant to thermo-mechanical expansion has a thermal expansion coefficient lower

than approximately 10 x 10⁻⁶ °K⁻¹.

14. (original) The integrated circuit incorporating an Electrostatic Discharge

(ESD) protection device according to claim 12, wherein said material substantially more

2

Application No. 10/635,391

Art Unit: 2815

resistant to thermo-mechanical expansion has a melting temperature higher than approximately 1500 °K.

15. (original) The integrated circuit incorporating an Electrostatic Discharge (ESD) protection device according to claim 12, wherein said material substantially more resistant to thermo-mechanical expansion has a tensile strength higher than approximately 200 MPa (Mega Pascals).

16. (original) The integrated circuit incorporating an Electrostatic Discharge (ESD) protection device according to claim 12, wherein said material substantially more resistant to thermo-mechanical expansion has a fracture toughness approximately higher than 1.0 MPa m^{1/2}.

17. (original) The integrated circuit incorporating an Electrostatic Discharge (ESD) protection device according to claim 12, wherein the ESD switch is a MOSFET transistor and the active device region comprises:

a source region;

a drain region; and

a channel region between the source region and the drain region.

18. (original) The integrated circuit incorporating an Electrostatic Discharge (ESD) protection device according to claim 12, wherein said material resistant to thermo-mechanical expansion is composed primarily of titanium nitride (TiN).